



CHAIRMAN

## Federal Communications Commission

Washington, D.C.

November 18, 2002

The Honorable Edward J. Markey  
Ranking Member  
Subcommittee on Telecommunications  
and the Internet  
Committee on Energy and Commerce  
U.S. House of Representatives  
2322 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congressman Markey:

Thank you for your letter of October 18, 2002, encouraging the Commission to act expeditiously to spark investment in the telecommunication's marketplace. Specifically, you urge us to press for rule adjustments and appropriate frequency allocations necessary to foster the growth and innovation associated with unlicensed technologies.

I am confident that the Commission shares your vision. Unlicensed operations have proven themselves to be extraordinarily valuable to consumer. To build on these successes, we are taking a number of proactive steps to accelerate and improve the efficiency of spectrum use here in the United States. For instance, the Commission's Spectrum Policy Task Force results are now public and the Commission released its Final Report on Friday November 15, 2002. One area that the Commission's task force assessed directly was the need to make available additional spectrum for unlicensed devices.

The task force observed that today's spectrum allocation policies rely strictly on discrete frequency allotments within given geographic areas, and do little to exploit the "time" dimension of spectrum. Despite the fact that certain frequency bands are reserved for use on a full time basis in a given geography, seldom are those bands in continuous use. Carefully designed, flexible use of various frequency bands can promote more efficient overall utilization of our spectrum resources and open existing bands to new creative uses, both licensed and unlicensed.

To increase spectrum utilization, which would provide incentives for investment in the telecom sector as well as increase opportunity for unlicensed devices, the task force has recommended that the Commission examine policies related to the following four major categories:

- Frequency Agile Devices - Transmitter/receiver pairs that can "seek" idle spectrum in a defined range of bands, transmit for a limited period, then hunt for another idle spot to transmit again. Devices incorporating this technology would have the flexibility to adapt

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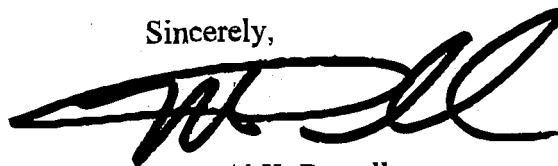
to the environment in which they operate and share existing bands on a non-interfering basis

- Noise Temperature Threshold - A defined threshold below which sophisticated devices can operate as if they were background noise and above which conventional services can operate unimpeded. The noise temperature threshold will vary from band to band across the spectrum.
- Receiver Performance Standards - A set of criteria that specify the "noise" level that a receiver must tolerate in order to operate successfully in a given frequency band.
- Secondary Markets - A general policy and structure that will permit primary licensees to resell secondary rights to other users in their primary bands. Such a scheme will provide a streamlined means for users to gain access to spectrum.

To that end, the Commission plans to initiate several specific rulemakings to examine how these findings can be implemented. In particular, we plan to initiate rulemakings by early next year that will identify specific frequency bands, both above and below 2 GHz, that we believe may be suitable for use by frequency agile unlicensed devices. In the interim, I believe that recent Commission actions such as the February 2002 Ultra-wideband proceeding, and the May 2002 Spread Spectrum proceeding, which relax restrictions and eliminate unnecessary regulations for unlicensed digital transmission systems, are affirmative steps to maintain industry momentum in the near term.

I agree strongly that these issues are of major national interest. I look forward to working with you and other Members of Congress as we develop spectrum management policies that are flexible enough to encourage the innovative technologies of today and tomorrow.

Sincerely,



Michael K. Powell  
Chairman